Serial No.: 09/731,261 Docket No.: 3284/1230 Page 2

The following <u>Listing of the Claims</u> will replace all prior versions and all prior listings of the claims in the present application:



Serial No.: 09/731,261 Docket No.: 3284/1230

Page 3

17. (Cancelled)

18. (Cancelled)

- 19. (Previously Presented) A method of isolating a stem cell from a pancreatic islet of Langerhans, comprising the steps of:
 - (a) removing a pancreatic islet from a donor;
- (b) culturing cells from the pancreatic islet under conditions wherein said cultured cells comprise nestin-positive cells which have migrated from said islet;
 - (c) and selecting said nestin-positive cells from the culture.

20. (Cancelled)

- 21. (Previously Presented) The method of claim 19 comprising the additional step of:
- (d) expanding the nestin-positive cells by treatment with an agent selected from the group consisting of EGF, bFGF-2, high glucose, KGF, HGF/SF, GLP-1, exendin-4, IDX-1, a nucleic acid molecule encoding IDX-1, betacellulin, activin A, TGF-β, and combinations thereof.
- 22. (Previously Presented) A method of inducing the differentiation of an isolated nestin-positive pancreatic stem cell into a pancreatic progenitor cell, comprising the step of:

treating a nestin-positive pancreatic stem cell with an agent selected from the group consisting of EGF, bFGF-2, high glucose, KGF, HGF/SF, IDX-1, a nucleic acid molecule encoding IDX-1, GLP-1, exendin-4, betacellulin, activin A, TGF-β, and combinations thereof, whereby the stem cell subsequently differentiates into a pancreatic progenitor cell.

23. (Original) The method of claim 22, wherein the pancreatic progenitor cell subsequently forms pseudo-islet like aggregates.

Serial No.: 09/731,261 Docket No.: 3284/1230 Page 4
24. (Original) An isolated, nestin-positive human pancreatic or liver stem cell that is not a neural stem cell.
25. (Original) The isolated stem cell of claim 24 that differentiates to form insulin-producing beta cells.
26. (Original) The isolated stem cell of claim 24 that differentiates to form glucagon-producing alpha cells.
27. (Original) The isolated stem cell of claim 24 that differentiates to form pseudo-islet like

aggregates.

Serial No.: 09/731,261 Docket No.: 3284/1230

Page 5

40. (Cancelled)

41. (Cancelled)

- 42. (Previously Presented) The method of claim 19, wherein said migrated cells from step b form a monolayer.
- 43. (Currently Amended) A method of isolating a stem cell from a pancreatic islet of Langerhans, comprising the steps of:
 - (a) removing a pancreatic islet from a donor;
 - (b) culturing cells from the pancreatic islet in a first vessel coated with concanavalin A to separate concanavalin A adherent and non-adherent cells;
 - (c) transferring <u>said non-adherent</u> cells from step (b) to a second vessel not coated with concanavalin A;
 - (d) culturing cells from step (c) in said second vessel to produce a cell culture;
 - (e) selecting a nestin-positive cell from step (d) to produce an isolated stem cell.
- 44. (Currently Amended) The isolated nestin-positive [human] pancreatic stem cell, wherein said stem cell is isolated by the method of claim 19 or claim 43.